Radiocommunication Study Groups

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IAFI

FURTHER UPDATES TO WORKING DOCUMENT TOWARDS A PRELIMINARY DRAFT REVISION OF RESOLUTION ITU-R 55-3

Background

WP5A, at its last meeting initiated draft revisions of Resolution ITU-R 55-3 and sought contributions on possible editorial, and/or more substantive, revisions to this ITU-R Resolution.

Proposals

The proposed updates to Resolution 55-3 are given in the attachment. Changes proposed by IAFI in this contribution are highlighted in yellow.

Enclosed: Updated working document

Radiocommunication Study Groups

Source: Document 5A/TEMP/165

Annex 19 to Document 5A/491-E
29 November 2021
English only

Annex 19 to Working Party 5A Chairman's Report

WORKING DOCUMENT TOWARDS A PRELIMINARY DRAFT REVISION OF RESOLUTION ITU-R 55-3

ITU-R studies of disaster prediction, detection, mitigation and relief

(2007-2012-2015-2019-…)

The ITU Radiocommunication Assembly,

considering

a) the importance of radiocommunication systems in ~~assisting~~ early warning and alerting for disaster management as well as ~~through techniques for early warning,~~its prevention, mitigation and relief;

b) that ITU-R Study Groups play an important role in disaster management, particularly in the prediction, alerting, detection, mitigation and relief activities necessary to survive the event and to minimize the loss of life and property;

c) that each ITU-R Study Group brings expertise to the complex mechanisms required to provide relief for the affected area;

d) that it is vital for the ~~various necessary~~ radiocommunications systems used for disaster communications to have access to the necessary radio spectrum, in order to effectively predict, detect, alert, mitigate and relieve disaster event situations,

noting

a) Resolution 34 (Rev. Buenos Aires, 2017) of the World Telecommunication Development Conference, on the role of telecommunications/information and communication technologies in disaster preparedness, early warning, rescue, mitigation, relief and response; *[Editor's note: To be updated based on the outcomes of WTDC 2022]*

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b) § 91 c) of the Tunis Agenda of the World Summit on the Information Society (WSIS), which states: "Working expeditiously towards the establishment of standards-based monitoring and worldwide early-warning systems linked to national and regional networks and facilitating emergency disaster response all over the world, particularly in high-risk regions";~~*[Editor's note: To be updated based on the latest WSIS.]*~~

c~~a~~) Resolution 136 (Rev. Dubai, 2018) of the Plenipotentiary Conference, on the use of telecommunications/information and communication technologies for monitoring and management in emergency and disaster situations for early warning, prevention, mitigation and relief resolved to instruct the Directors of the Bureaux:

[Editor's note: To be updated based on the outcomes of PP-22]

[Editor's note: Possibly reformulate to avoid updating: "Plenipotentiary Conference's latest version of the Resolution on…"]

1) to continue their technical studies and to develop recommendations, through the ITU Study Groups, concerning technical and operational implementation, as necessary, of advanced solutions to meet the needs of public protection and disaster relief telecommunications/ICTs, taking into account the capabilities, evolution and any resulting transition requirements of existing systems, particularly those of many developing countries, for national and international operations;

2) to support the development of robust, comprehensive, all-hazards emergency and disaster early-warning, mitigation and relief systems, at national, regional and international levels, including monitoring and management systems involving the use of telecommunications/ICTs (e.g. remote sensing), in collaboration with other international agencies, in order to support coordination at the global and regional level;

3) to promote implementation by appropriately alerting authorities of the international content standard for all-media public warning, in concert with ongoing development of guidelines by all ITU Sectors for application to all disaster and emergency situations;

4) to continue to collaborate with organizations that are working in the area of standards for emergency telecommunications/ICTs and for communication of alert and warning information, in order to study the appropriate inclusion of such standards in ITU's work and their dissemination, in particular in developing countries;

[d~~b~~) the ~~following~~related ITU-R Recommendations and Reports listed in Annex 1 of this Resolution.

[Editor's note: The way in which to refer to the various ITU-R Recs and Reports needs to be further developed. Consider alternative formulations. Possibly numbers without titles. Link to website.]

[IAFI Editor's Note:It is proposed to move the list below to Annex 1]

~~Recommendation ITU-R S.1001 "Use of systems in the fixed satellite service in the event of natural disasters and similar emergencies for warning and relief operations";~~

~~Recommendation ITU-R BO.1774 "Use of satellite and broadcast infrastructures for public warning, disaster mitigation and relief";~~

~~Recommendation ITU-R M.1854 "Use of mobile satellite service in disaster response and relief";~~

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– Report ITU-R M.2149 "Use and examples of mobile satellite service systems for relief operation in the event of natural disasters and similar emergencies";

– Report ITU-R S.2151 "Use and examples of systems in the fixed satellite service in the event of natural disasters and similar emergencies for warning and relief operations";

– Recommendation ITU-R F.1105 "Fixed wireless systems for disaster mitigation and relief operations" (with an appendix on a Regional Digital Simultaneous Communication System (RDCSS));

– Recommendation ITU-R M.1042 "Disaster communications in the amateur and amateur-satellite services";

– Recommendation ITU-R M.1637 "Global cross-border circulation of radiocommunication equipment in emergency and disaster relief situations";

– Recommendation ITU-R M.1826 "Harmonized frequency channel plan for broadband public protection and disaster relief operations at 4 940-4 990 MHz in Regions 2 and 3";

– Recommendation ITU-R M.2009 "Radio interface standards for use by public protection and disaster relief operations in accordance with Resolution **646 (Rev.WRC-15)**";

– Recommendation ITU-R M.2015 "Frequency arrangements for public protection and disaster relief radiocommunication systems in accordance with Resolution **646 (Rev.WRC-19)**";

– Reports ITU-R F.2061 and ITU-R F.2087 discuss the role of HF radiocommunication systems in disaster relief operations;

– Report ITU-R M.2085 "Role of the amateur and amateur-satellite services in support of disaster mitigation and relief";

– Report ITU-R M.2291 "The use of International Mobile Telecommunications for broadband public protection and disaster relief applications";

– Report ITU-R M.2377 "Radiocommunication objectives and requirements for Public Protection and Disaster Relief (PPDR)";

– Report ITU-R M.2415 "Spectrum needs for Public Protection and Disaster Relief (PPDR)";

– Report ITU-R M.2441 "Emerging usage of the terrestrial component of International Mobile Telecommunication (IMT);

– Recommendation ITU-R BO.1774 / BT.1774;

c) Recommendation ITU-R M.2083 with regard to disaster prediction, detection, mitigation and relief;

d) Recommendation ITU-R BS.2107, on use of International Radio for Disaster Relief (IRDR) frequencies for emergency broadcasts in the High Frequency (HF) bands, defines the IRDR frequencies that may be used for HF emergency broadcasts;

e) Report ITU-R BT.2299, on broadcasting for public warning, disaster mitigation and relief, provides a compilation of supporting evidence that broadcasting plays a critically important role in disseminating information to the public in times of emergencies,]

taking into account

a) Resolution **646 (Rev.WRC-19)** on Public Protection and Disaster Relief. PDR…;

b) Resolution **647 (Rev.WRC-19)** on ~~……;~~Radiocommunication aspects, including spectrum-management guidelines, for early warning, disaster prediction, detection, mitigation and relief operations relating to emergencies and disasters

c) Other relevant resolutions of world radiocommunication conferences ~~relating to this matter;~~;

d) ~~——~~Resolution ITU-R 60,

emphasizing

that ITU-R Study Groups have an important role in disaster management through their technical and operational studies and Recommendations that support disaster prediction, detection, mitigation and response activities which are critical for minimizing loss of life and property and for providing relief to disaster-affected areas,

recognizing

a) the importance of the effective use of the radio-frequency spectrum for radiocommunications in disaster prediction, detection, alerting, mitigation and relief.:

~~*a)* Resolution 136 (Rev. Dubai, 2018) of the Plenipotentiary Conference, on the use of telecommunications/information and communication technologies for monitoring and management in emergency and disaster situations for early warning, prevention, mitigation and relief resolved to instruct the Directors of the Bureaux:~~

~~*[Editor's note: To be updated based on the outcomes of PP-22]*~~

~~*[Editor's note: Possibly reformulate to avoid updating: "Plenipotentiary Conference's latest version of the Resolution on…"]*~~

~~1) to continue their technical studies and to develop recommendations, through the ITU Study Groups, concerning technical and operational implementation, as necessary, of advanced solutions to meet the needs of public protection and disaster relief telecommunications/ICTs, taking into account the capabilities, evolution and any resulting transition requirements of existing systems, particularly those of many developing countries, for national and international operations;~~

~~2) to support the development of robust, comprehensive, all-hazards emergency and disaster early warning, mitigation and relief systems, at national, regional and international levels, including monitoring and management systems involving the use of telecommunications/ICTs (e.g. remote sensing), in collaboration with other international agencies, in order to support coordination at the global and regional level;~~

~~3) to promote implementation by appropriately alerting authorities of the international content standard for all media public warning, in concert with ongoing development of guidelines by all ITU Sectors for application to all disaster and emergency situations;~~

~~4) to continue to collaborate with organizations that are working in the area of standards for emergency telecommunications/ICTs and for communication of alert and warning information, in order to study the appropriate inclusion of such standards in ITU's work and their dissemination, in particular in developing countries;~~

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b) that disaster management in the field of radiocommunications comprises the following, equally important, aspects:

1) early warning and prevention, through:

– disaster prediction, including the acquisition and processing of data concerning the probability of future disaster occurrence, location and duration;

– disaster detection, including the detailed analysis of the topical likelihood and severity of a disaster event;

2) alerting the public and the relevant authorities

32) disaster mitigation including the rapid promulgation of imminent disaster information and corresponding alerts to disaster relief agencies;

34) post-disaster relief radiocommunications, including the provision of *in situ* terrestrial and satellite communication systems to aid in securing and stabilizing life and property in the affected area,

recognizing further

that, generally, the mitigation of a disaster event on the territory of a developed country may have less of an impact on the local economy than that of a similar disaster event on the territory of a developing country,

resolves

~~that, given the importance of the effective use of the radio frequency spectrum for radiocommunications in disaster situations:~~

1) – that the concerned ITU-R Study Groups undertake studies and develop ~~guidelines~~ Recommendations and Reports, as necessary related to the management of radiocommunications in disaster prediction, detection, alerting, mitigation and relief.

2) that the concerned ITU-R sSudy Groups collaborat~~e~~ively and cooperat~~e~~ively with the other two ~~in~~ ITU Sectors, the General Secretariat of the ITU and with organizations external to the Union;

2) – that the relevant ITU-R Study Groups continue studies on new emerging technologies which could support disaster prediction, alerting, detection, mitigation and relief,

invites the Study Groups

to take into consideration the scope of ongoing studies/activities outlined in the ITU-R webpage on Emergency Radiocommunications[1] and information provided by the Bureau on related activities of the other two Sectors and the General Secretariat, in the development of their work programmes in order to avoid duplication of effort.

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[1] https://www.itu.int/en/ITU-R/information/Pages/emergency.aspx.

Annex 1

LIST OF RELATED ITU-R RECOMMENDATIONS AND REPORTS

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– Recommendation ITU-R S.1001 “Use of systems in the fixed-satellite service in the event of natural disasters and similar emergencies for warning and relief operations”;
– Recommendation ITU-R BO.1774 “Use of satellite and broadcast infrastructures for public warning, disaster mitigation and relief”;
– Recommendation ITU-R M.1854 “Use of mobile-satellite service in disaster response and relief”;
– Report ITU-R M.2149 “Use and examples of mobile-satellite service systems for relief operation in the event of natural disasters and similar emergencies”;
– Report ITU-R S.2151 "Use and examples of systems in the fixed-satellite service in the event of natural disasters and similar emergencies for warning and relief operations”;
– Recommendation ITU-R F.1105 “Fixed wireless systems for disaster mitigation and relief operations" (with an appendix on a Regional Digital Simultaneous Communication System (RDCSS));
– Recommendation ITU-R M.1042 “Disaster communications in the amateur and amateur-satellite services”;
– Recommendation ITU-R M.1637 “Global cross-border circulation of radiocommunication equipment in emergency and disaster relief situations”;
– Recommendation ITU-R M.1826 “Harmonized frequency channel plan for broadband public protection and disaster relief operations at 4 940-4 990 MHz in Regions 2 and 3”;
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– Reports ITU-R F.2061 and ITU-R F.2087 discuss the role of HF radiocommunication systems in disaster relief operations;
– Report ITU-R M.2085 “Role of the amateur and amateur-satellite services in support of disaster mitigation and relief”;
– Report ITU-R M.2291 “The use of International Mobile Telecommunications for broadband public protection and disaster relief applications”;
– Report ITU-R M.2377 “Radiocommunication objectives and requirements for Public Protection and Disaster Relief (PPDR)”;
– Report ITU-R M.2415 “Spectrum needs for Public Protection and Disaster Relief (PPDR)”;
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– Recommendation ITU-R BO.1774 / BT.1774;

– Recommendation ITU-R BS.2107, on use of International Radio for Disaster Relief (IRDR) frequencies for emergency broadcasts in the High Frequency (HF) bands, defines the IRDR frequencies that may be used for HF emergency broadcasts;

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